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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/775,749

02/10/2004

Kyle G. Peltonen

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EXAMINER

ONI, OLUBUSOLA

ART UNIT

PAPER NUMBER

2168

DATE MAILED: 09/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/775,749	PELTONEN ET AL.	
	Examiner	Art Unit	
	OLUBUSOLA ONI	2168	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02/10/2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is responsive to communications: Application filed on 02/10/2004

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 22 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 22 contains both a product and process in the same claim; an apparatus and the method step of using the apparatus, which makes it indefinite under 35 U.S.C. 112, second paragraph.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 22 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

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Claim 22 is rejected because the claim is directed to neither a "process" nor a "machine", and as such it is not limited to tangible, patent-eligible subject matter.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-31 are rejected under 35 U.S.C. 102(e) as being anticipated by Parikh Prashant (Pub No. U.S. 2005/0060304)

For claim 1, Parikh teaches "obtaining keyword data corresponding to a set of data (See paragraph [0032]); generating an inverted keyword index corresponding to the keyword

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data (See paragraph [0011, 0086, 0250, 0034-036, 0043-0053, 0058-0065]); storing the inverted keyword index in a shared process memory (See paragraph [0043]); obtaining a keyword query from a first process (See paragraph [0032, 0257]); and processing the keyword query from the inverted keyword index in a shared memory" (See paragraph [0032])

For claim 2, Parikh teaches "wherein the set of data corresponds to a set of documents"(See paragraph [0032, 0040])

For claim 3, Parikh teaches "wherein the set of data corresponds to a set of rows in a database"(See paragraph [0240])

For claim 4, Parikh teaches "wherein generating an inverted keyword index includes generating an inverted keyword attribute index"(See paragraph [0086, 0250, 0034-036, 0043-0053, 0058-0065])

For claim 5, Parikh teaches "wherein the inverted keyword attribute index corresponds to keyword occurrence information in the set of data"(See paragraph [0250, 0236, 0333])

For claim 6, Parikh teaches "wherein an inverted keyword attribute index corresponds to data selected from the group consisting of language information, format information,

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sentence information, ranking information, document timestamp information, and metadata information”(See paragraph [0032, 0240])

For claim 7, Parikh teaches “wherein the inverted keyword index and the inverted keyword attribute index correspond to red and black index trees”(See paragraph[0032, 0041-0043])

For claim 8, Parikh teaches “wherein storing the inverted keyword index includes dynamically adjusting memory pointers corresponding to the inverted keyword index”(See paragraph [0086])

For claim 9, Parikh teaches “a computer-readable medium having computer-executable instructions for performing the method recited in claim 1” (See paragraph [0218-0219])

For claim 10, Parikh teaches “a computer system including a processor, a memory, and an operating environment, the computer system operable to perform the method recited in claim 1”(See paragraph [0218-0220])

For claims 11 this claim is rejected on grounds corresponding to the arguments given above for rejected claim 1 and is similarly rejected.

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For claims 12 this claim is rejected on grounds corresponding to the arguments given above for rejected claim 2 and is similarly rejected.

For claims 13 this claim is rejected on grounds corresponding to the arguments given above for rejected claim 3 and is similarly rejected.

For claims 14 this claim is rejected on grounds corresponding to the arguments given above for rejected claim 5 and is similarly rejected.

For claims 15 this claim is rejected on grounds corresponding to the arguments given above for rejected claim 6 and is similarly rejected.

For claims 16 this claim is rejected on grounds corresponding to the arguments given above for rejected claim 7 and is similarly rejected.

For claim 17, Parikh teaches "obtaining the first keyword from the set of data (See paragraph [0032]); inserting the keyword into the inverted keyword index (See paragraph [0086, 0032-036, 0043-0053, 0058-0065]); inserting keyword attribute data corresponding to the keyword into a temporary keyword attribute index (See paragraph [0034-036, 0043-0053, 0058-0065, 0086]); repeating (a)-(c) for all keyword data in the set of data (See paragraph [0032]); and (e) converting the temporary keyword attribute index into the inverted keyword attribute index in the shared process memory

buffer”(See paragraph [0032])

For claim 18, Parikh teaches “obtaining a keyword query from a process; and processing the keyword query from the inverted keyword index in the shared memory buffer”(See paragraph [0032]).

For claim 19, Parikh teaches “obtaining a second keyword query from a second process; and processing the keyword query from the inverted keyword index in the shared memory buffer”(See paragraph [0032]).

For claim 20 this claim is rejected on grounds corresponding to the arguments given above for rejected claim 8 and is similarly rejected.

For claim 21 this claim is rejected on grounds corresponding to the arguments given above for rejected claim 9 and is similarly rejected.

For claim 22 this claim is rejected on grounds corresponding to the arguments given above for rejected claim 10 and is similarly rejected.

For claim 23, Parikh teaches “one or more processes for issuing keyword queries (See paragraph [0032, 0257]); an index generation component for obtaining a set of data and generating an inverted keyword index (See paragraph [0086, 0250, 0034-036, 0043-

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0053, 0058-0065]); a shared memory buffer for storing the inverted keyword index of a set of data (See paragraph [0043]); and a query processing component for processing keyword queries issued by the one or more processes from the inverted keyword index stored in the shared memory buffer”(See paragraph[0032])

For claim 24 this claim is rejected on grounds corresponding to the arguments given above for rejected claim 2 and is similarly rejected.

For claim 25 this claim is rejected on grounds corresponding to the arguments given above for rejected claim 3 and is similarly rejected.

For claim 26, Parikh teaches “wherein the shared memory buffer includes an inverted keyword attribute index corresponding to each note in the inverted keyword index”(See paragraph [0032]).

For claim 27 this claim is rejected on grounds corresponding to the arguments given above for rejected claim 5 and is similarly rejected.

For claim 28 this claim is rejected on grounds corresponding to the arguments given above for rejected claim 6 and is similarly rejected.

For claim 29 this claim is rejected on grounds corresponding to the arguments given above for rejected claim 7 and is similarly rejected.

For claim 30 this claim is rejected on grounds corresponding to the arguments given above for rejected claim 8 and is similarly rejected.

For claim 31, Parikh teaches " a disk subsystem for storing at least a portion of the inverted keyword index of a set of data (See paragraph [0043]); and a merge process for merging the inverted keyword index in the shared memory with the portion of the inverted keyword index in the disk subsystem"(See paragraph [0032])

CONCLUSION

7 Any inquiry concerning this communication or earlier communications from the examiner should be directed to OLUBUSOLA ONI whose telephone number is 571-272-2738. The examiner can normally be reached on 7.30-5.00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, TIM VO can be reached on 571-272-3642. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



KHANH B. PHAM
PRIMARY EXAMINER

OLUBUSOLA ONI
Examiner
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